10/537805 JC17 Rec d PCT/PTO 07 JUN 2005

IN THE UNITED STATES DESIGNATED/ELECTED OFFICE

International Application No. : PCT/EP2003/012693

International Filing Date : 13 November 2003 (13.11.2003)

Priority Date(s) Claimed : 07 December 2002 (07.12.2002)

Applicant(s) (DO/EO/US) : Matthew FRANCIS, et al.

Title: LIQUID-CRYSTALLINE MEDIUM AND LIQUID-CRYSTAL DISPLAY HAVING

HIGH TWIST

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §§ 1.56, 1.97 and 1.98

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

This information disclosure statement is made in accordance with 37 C.F.R. §§ 1.56, 1.97 and 1.98 as follows:

Timing and Fees

\bowtie	Under 37 C.F.R. § 1.97(b), no fee or statement is required for filing this information disclosure statement is filed:						
		within three months of the filing date of a national application other than a CPA under § 1.53(d);					
	\boxtimes	within three months of the actual filing date of the national phase of a PCT application; OR					
		before the mailing of a first substantive office action (including after filing of an RCE).					
		37 C.F.R. § 1.97(c), this information disclosure statement is filed after the periods ied in 37 C.F.R. § 1.97(b), but before the mailing date of:					
		a final rejection under 37 C.F.R. 1.113; termination of prosecution, e.g. Ex Parte Quayle, M.P.E.P § 609(B)(2); OR a notice of allowance under 37 C.F.R. § 1.311; and					



●10/5378**05**

JC17 Rec'd PCT/PTO 07 JUN 2005

		is acco	ompanied by:	JC17 Rec'd PCT/PTO	07 JUN 2
			the statement as specified in 37	C.F.R. § 1.97(e) set out belo	ow; OR
			a check covering the fee of \$180	0.00 under 37 C.F.R. § 1.17((p).
			R. § 1.97(d), this information disc lowing actions which have not be		r the mailing
		a final	action under 37 C.F.R. § 1.113;		
		termin	ation of prosecution, e.g. Ex Part	e Quayle, M.P.E.P § 609(B))(2);
		OR a r	notice of allowance under 37 C.F.	R. § 1.311;	
	AND i	s filed	on or before payment of the issue	fee; AND is accompanied b	oy:
			tement as specified in 37 C.F.R. § 00 under 37 C.F.R. § 1.17(p).	1.97(e) as set forth below, a	nd the fee of
Staten	nents Ur	nder 37	C.F.R. 1.97(e)		
			Each item of information constatement was cited in a commun counterpart foreign application h months prior to the filing date of	nication from a foreign pater aving a mailing date not mo	nt office in a re than three
			No item of information contained was cited in a communication from foreign application, and to the after making reasonable inquiry, information disclosure statement in 37 C.F.R. § 1.56(c) more than the information disclosure statement.	om a foreign patent office in a knowledge of the undersign no item of information cont t was known to any individua to three months prior to the f	a counterpart ned attorney ained in this al designated
Cited	Materia	<u>ls</u>			
		ancest	s of materials listed but not attache or application Serial No, on by the applicant; see 37 C.F.R. §	n Form 892 by the Examiner	
	\boxtimes	-	s of materials listed but not attach dated April 16, 2004.	ned were cited in an internat	ional search
		Not re	quired by 37 CFR § 1.98.		
		Copie	s of the materials listed are attach	ed (except for the foregoing	g).

Non-English Language References

inglish l	Language References
	An English-language search report or equivalent paper from a foreign patent office is provided indicating the relevance of the cited reference(s).
\boxtimes	A foreign-language search report from a foreign patent office is provided, and pertinent parts are translated substantively below:
	 X= document of particular relevance when it is taken alone Y= document of particular relevance when it is combined with another such document A= document defining the general state of the art O= non-written disclosure P= intercalated document T= document cited to understand the theory or principle underlying the invention E= patent document which has the benefit of a date earlier than the filing date and which was published only on or after this filing date D= cited in the application L= cited for another reason &= publication of member of same patent family Translation of other relevant information on foreign search report In the search report, "Seite" means page, "Seiten" means pages, "Verbindungen der Formel" means Figure of formula, "Beispele" means examples, and "das ganze Dokument" means the entire document, "Spalte" means column, "Zeile" means line, "Abbildungen" means claims, "Anspruch" means example, "Zusammenfassung" means summary, and "Tabelle" means table, and "Tabellen" means tables "in der Anmeldung erwaehnt" means cited in the application, "Schema" means scheme, "und" means and, "Absatz" means break, "Abildung" means figure.

Other Information

Payn	nent of Fees Due (If Any):	
	A check for \$ covering the fee identified above	e is attached.
	Please charge to Deposit Account No. 13-3402 \$	for the fee identified above.

The Commissioner is hereby authorized to charge or credit any overpayment to Deposit Account #13-3402, two copies of this paper are attached for this purpose.

Respectfully submitted,

Anthony J. Zelano, Reg. No. 27,969 Attorney/Agent for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P.C.
Arlington Courthouse Plaza 1
2200 Clarendon Blvd. Suite 1400
Arlington, Virginia 22201
Telephone: (703) 243-6333
Facsimile: (703) 243-6410

Attorney Docket No.: MERCK-3033

Date: June 7, 2005

AJZ:ssr



JC17 Rec' T/PTO 07 JUN 2005

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031 U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB coetrol pumpler.

Substitute	for form 1449A/PTC)			Complete if Known LU 1937
				Application Number	USNP of PCT/EP2003/012693
INFO	RMATION	DISC	LOSURE	Filing Date	13 November 2003 (13.11.2003)
STAT	EMENT B	Y AP	PLICANT	First Named Inventor	Matthew FRANCIS, et al.
				Group Art Unit	unknown
((use as many she	eets as n	ecessary)	Examiner Name	unknown
Sheet	1	of	2	Attorney Docket Number	MERCK-3033

Examiner Initials *	Cite No.1	U.S. Patent Docum	ent Kind Code ² (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY
mudis	001	2004/054196	(11 12.110.111)	KIRSCH, ET AL.	03-18-2004
	002	5,976,407		TARUMI, ET AL.	11-02-1999
	003	2003/052305		COATES, ET AL.	03-20-2003
	004	5,295,009		BARNIK, ET AL.	03-15-1994
	005	5,231,528		ESCHER, ET AL.	07-27-1993
	006	2001/004108		IWAMATSU, ET AL.	06-21-2001

		Foreign Patent Document				Date of Publication of	Pages, Columns, Lines, Where Relevant	
Examiner Initials*	Cite No.1	Office ³	Number⁴	Kind Code ⁵ (if known)	Name of Patentee or Applicant of Cited Document	Cited Document MM-DD-YYYY	Passages or Relevant Figures Appear	T⁵
	007	wo	02/100979		MERCK PATENT GMBH	12-19-2002		
	800	wo	02/34739		MERCK PATENT GMBH	05-02-2002		001
	009	wo	02/094805		MERCK PATENT GMBH	11-28-2002		
	010	DE	197 07 807		MERCK PATENT GMBH	09-03-1998		002
	011	DE	100 39 377		MERCK PATENT GMBH	03-08-2001		003
	012	DE	196 27 350		GREBE, ET AL.	01-08-1998		
	013	wo	91/06613		HOFFMANN LA ROCHE	05-16-1991		004
	014	EP	0 404 081		HOECHST AG	12-27-1990		005
		·						

1 = 1 = 1 = 1	Date Considered
---------------	--------------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached. Number refers to English language corresponding family member.



Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valig OMB control number

11115 Substitute for form 1449A/PTO Complete if Known Application Number USNP of PCT/EP2003/012693 INFORMATION DISCLOSURE Filing Date 13 November 2003 (13.11.2003) STATEMENT BY APPLICANT First Named Inventor Matthew FRANCIS, et al. Group Art Unit unknown (use as many sheets as necessary) **Examiner Name** unknown Sheet of Attorney Docket Number **MERCK-3033**

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	015	FISCHER F ET AL: "MOLEKULARES VERDRILLUNGSVERMOEGEN VON KOHLENHYDRAT- DERIVATEN, HELICAL TWISTING POWER, CARBOHYDRATES, INDUCED CHOLESTERIC PHASE DIASTEREOMERS, LIQUID CRYSTALS" ZEITSCHRIFT FUER NATURFORSCHUNG A, A JOURNAL OF PHYSICAL SCIENCES, TUEBINGEN, DE, Bd. 43, Nr. 12, 01 December 1988; Seiten 1119-1125	
		-	
	*** · *** - ***		_
	•		
	-		

Examiner	Date	•
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.